

CLAIMS:

1. A method for detecting the onset or a predisposition to the onset of an inflammatory response in a mammal, said method comprising screening for the level of one or both of activin or follistatin protein and/or gene expression in said mammal wherein an increase in the level of said protein and/or gene expression is indicative of an inflammatory response.
2. The method according to claim 1 wherein said activin is activin A.
3. The method according to claim 2 wherein said inflammatory response is a local inflammatory response.
4. The method according to claim 2 wherein said inflammatory response is a systemic inflammatory response.
5. The method according to claim 3 or 4 wherein said inflammatory response is related to septic shock, toxic shock, sepsis, septicaemia, pancreatitis, appendicitis, meningitis, hepatic response to toxins or viruses, angiogenesis, psoriasis, neural protection, atherosclerosis, renal tubular necrosis, wound healing, traumatic injury, surgery or burns.
6. The method according to claim 5 wherein said inflammatory response is acute.
7. The method according to claim 4 wherein said systemic inflammatory response is related to systemic inflammatory response syndrome such as sepsis, septic shock, toxic shock, septicaemia, tissue trauma, meningitis or appendicitis.
8. The method according to claim 7 wherein said inflammatory response is acute.
9. A method for monitoring the progression of an inflammatory response in a mammal, said method comprising screening for modulation of the level of one or both of activin or follistatin protein and/or gene expression in said mammal wherein an increase in the level of said protein and/or gene expression relative to a

previously obtained level is indicative of the maintenance or worsening of said response and a decrease in said level is indicative of an improvement in said inflammatory response.

10. The method according to claim 9 wherein said activin is activin A.
11. The method according to claim 10 wherein said inflammatory response is a local inflammatory response.
12. The method according to claim 10 wherein said inflammatory response is a systemic inflammatory response.
13. The method according to claim 3 or 4 wherein said inflammatory response is related to septic shock, toxic shock, sepsis, septicaemia, appendicitis, pancreatitis, meningitis, hepatic response to toxins or viruses, angiogenesis, psoriasis, neural protection, atherosclerosis, renal tubular necrosis, wound healing, traumatic injury, surgery or burns.
14. The method according to claim 13 wherein said inflammatory response is acute.
15. The method according to claim 12 wherein said systemic inflammatory response is related to systemic inflammatory response syndrome such as sepsis, septicaemia, tissue trauma, meningitis or appendicitis.
16. The method according to claim 15 wherein said inflammatory response is acute.
17. A method for assessing the severity of an inflammatory response in a mammal, said method comprising quantitatively screening for the level of one or both of activin or follistatin protein and/or gene expression wherein the degree of increase in the level of said protein and/or gene expression is indicative of the severity of said inflammatory response.
18. The method according to claim 17 wherein said activin is activin A.

19. The method according to claim 18 wherein said inflammatory response is a local inflammatory response.
20. The method according to claim 18 wherein said inflammatory response is a systemic inflammatory response.
21. The method according to claim 19 or 20 wherein said inflammatory response is related to septic shock, sepsis, toxic shock, septicaemia, appendicitis, pancreatitis, meningitis, hepatic response to toxins or viruses, angiogenesis, psoriasis, neural protection, atherosclerosis, renal tubular necrosis, wound healing, traumatic injury, surgery or burns.
22. The method according to claim 21 wherein said inflammatory response is acute.
23. The method according to claim 20 wherein said systemic inflammatory response is related to systemic inflammatory response syndrome such as sepsis, toxic shock, septic shock, septicaemia, tissue trauma, meningitis or appendicitis.
24. The method according to claim 23 wherein said inflammatory response is acute.
25. The method according to any one of claims 17-24 wherein the greater the severity of said inflammatory response, the poorer the prognosis for the subject mammal.
26. The method according to claim 25 wherein said acute inflammatory response is sepsis.
27. The method according to claim 26 wherein a level of activin A and/or follistatin protein is at least about 2 times higher than levels within the normal range is indicative of a poor prognosis for said mammal.
28. The method according to claim 27 wherein said level is at least about three times higher than levels within the normal range.
29. The method according to claim 28 wherein said activin A is greater than 0.3 ng/ml

or a 24 hour period and/or the level of follistatin is greater than 20 ng/ml over a 24 hour period.

30. The method according to any one of claims 27 to 29 wherein said poor prognosis is death.
31. A method for detecting the onset or a predisposition to the onset of a condition characterised by an inflammatory response in a mammal, said method comprising screening for the level of one or both of activin or follistatin protein and/or gene expression in said mammal where an increase in the level of said protein and/or gene expression is indicative of the onset or predisposition to the onset of said condition.
32. A method for monitoring the progression of a condition characterised by an inflammatory response in a mammal, said method comprising screening for modulation of the level of one or both of activin or follistatin proteins and/or gene expression in said mammal wherein an increase in the level of said protein and/or gene expression relative to a previously obtained level is indicative of the maintenance or worsening of said condition and a decrease in said level is indicative of an improvement in said condition.
33. A method for assessing the severity of a condition characterised by an inflammatory response in a mammal, said method comprising quantitatively screening for the level of one or both of activin or follistatin protein and/or gene expression in said mammal wherein the degree of increase in the level of said protein and/or gene expression is indicative of the severity of said condition.
34. The method according to any one of claims 31 to 33 wherein said activin is activin A.
35. The method according to claim 34 wherein said inflammatory response is a local inflammatory response.

36. The method according to claim 34 wherein said inflammatory response is a systemic inflammatory response.
37. The method according to claim 35 or 36 wherein said condition is septic shock, sepsis, toxic shock, septicaemia, appendicitis, pancreatitis, meningitis, hepatic response to toxins or viruses, angiogenesis, psoriasis, neural protection, atherosclerosis, renal tubular necrosis, wound healing, traumatic injury, surgery or burns.
38. The method according to claim 37 wherein said inflammatory response is acute.
39. The method according to claim 36 wherein said condition is systemic inflammatory distress syndrome such as sepsis, septic shock, toxic shock, septicaemia, tissue trauma, meningitis or appendicitis.
40. The method according to claim 39 wherein said inflammatory response is acute.
41. The method according to claim 33 wherein the greater the severity of said inflammatory response, the poorer the prognosis for the subject mammal.
42. The method according to claim 41 wherein said acute inflammatory response is sepsis.
43. The method according to claim 42 wherein a level of activin A and/or follistatin protein is at least about 2 times higher than levels within the normal range is indicative of a poor prognosis for said mammal.
44. The method according to claim 43 wherein said level is at least about three times higher than levels within the normal range.
45. The method according to claim 44 wherein said activin A is greater than 0.3 ng/ml or a 24 hour period and/or the level of follistatin is greater than 20 ng/ml over a 24 hour period.

46. The method according to any one of claims 43 to 45 wherein said poor prognosis is death.
47. The method according to any one of claims 1-46 wherein said screening is directed to activin and/or follistatin protein.
48. The method according to any one of claims 4, 7, 8, 12, 15, 16, 20, 23, 24, 36, 39 or 40 wherein said systemic inflammatory response is assessed based on analysis of peripheral levels of activin A and/or follistatin protein.
49. The method according to claim 48 wherein said peripheral levels of activin A and/or follistatin are blood levels.
50. The method according to claim 49 wherein said blood levels are assessed based on the analysis of a sample of blood or component derived therefrom.
51. The method according to any one of claims 1-50 wherein both activin and follistatin levels are assessed.
52. The method according to any one of claims 1 to 51 wherein said mammal is a human.